Unmanned Aircraft Systems In the National Airspace System

Presented to: FAA 27th Annual Great Lakes Region Airports Conference

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Agenda

- FAA UAS Organization
- What is an Unmanned Aircraft System
- Who's flying
- Where can UAS fly
- How to get authorization to fly
- NAS Architecture
- COA Process
- Questions

Federal Aviation Administration

J. Randolph Babbitt AOA-1 Administrator

Peggy Gilligan
Associate Administrator, AVS-1
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John Allen Director, AFS-1 Flight Standards Service

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Manager, AFS-400
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Senior Vice President, AJP-O NextGen and Operations Planning

Paul Fontaine

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Paula Nouragas

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Offices co-located with Military & other government UAS

David Grizzle

Chief Operating Officer, AJO-O Air Traffic Organization

Rick Ducharme

Senior Vice President, Operations

Elizabeth Lynn Ray

Vice President, AJV-O Mission Support Services

Dennis Roberts

Director, AJV-1
Airspace Services

Dean Fulmer

Acting Manager, AJV-13 Unmanned Aircraft Systems Group

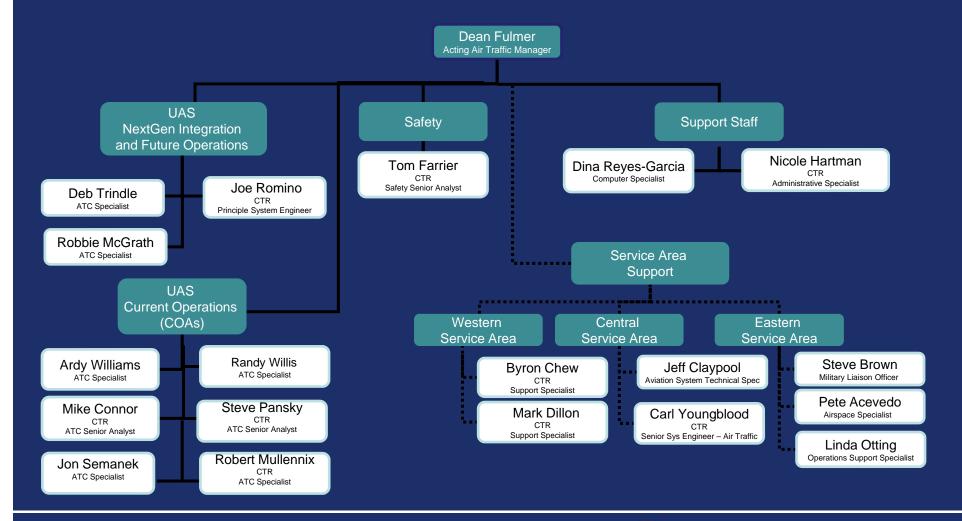
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FAA 27th Annual Great Lakes Region Airports Conference November 3, 2011



Air Traffic UAS Group





What is an UAS

- Unmanned Aircraft: A device used or intended to be used for flight in the air that has no onboard pilot
- System Includes:
 - Unmanned Aircraft (UA)
 - Aircraft Control Station
 - Command & Control Link/s



The System





What do they look like?













What do they look like?









From the inside





Federal Aviation Administration

From the inside



Who's Flying

Public Use Aircraft

- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Energy
- Department of Homeland Security
- Department of Interior
- Department of Justice
- NASA
- State Universities
- Federal/State/Local Law Enforcement

Civil Aircraft – Special Airworthiness Certificates – Experimental

- AAI Corporation
- General Atomics



Where: Airspace

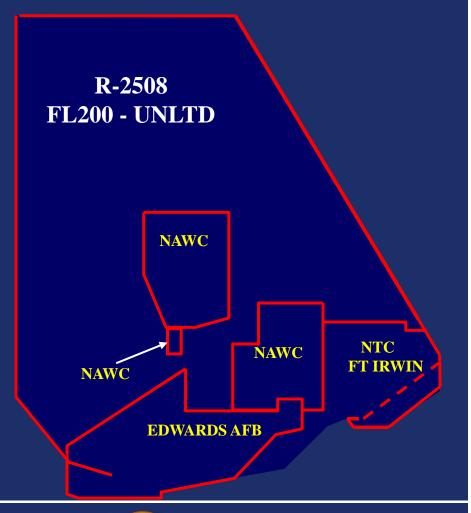
- Restricted Areas
- Warning Areas
- Prohibited Areas
- Rest of the National Airspace System
- Flight Information Regions

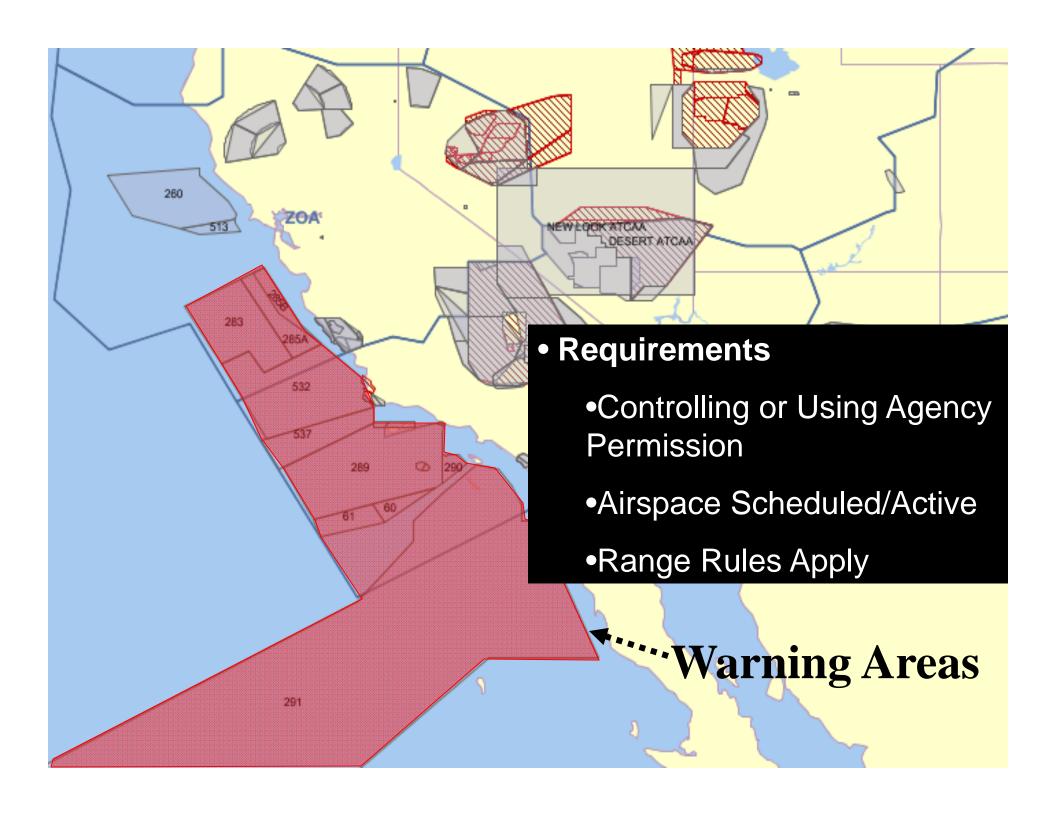


Restricted Areas

Requirements

- Controlling or Using Agency Permission
- AirspaceScheduled/Active
- Range Rules Apply



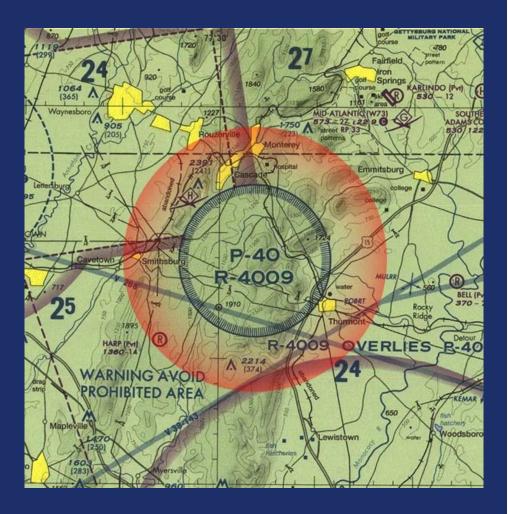


Prohibited Area

National Security and Welfare

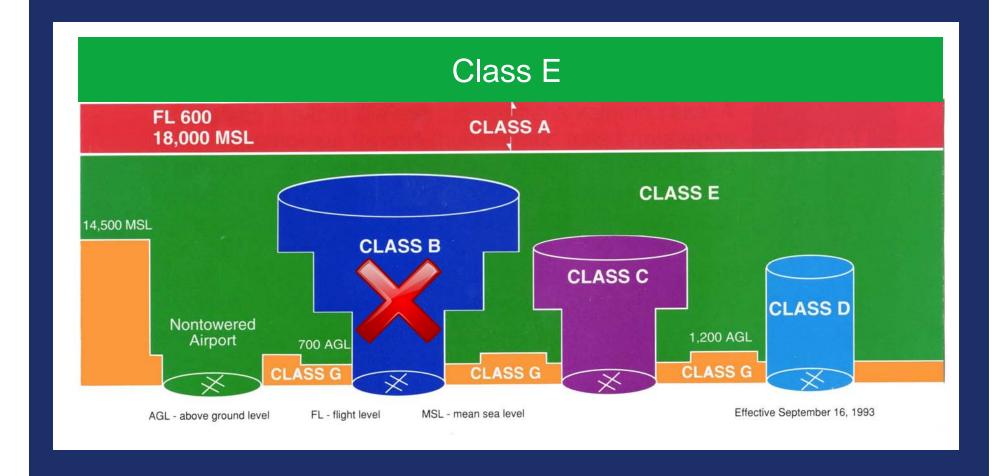
FAA Administrator or USSS Permission Required

Note: Not normally approved for aviation



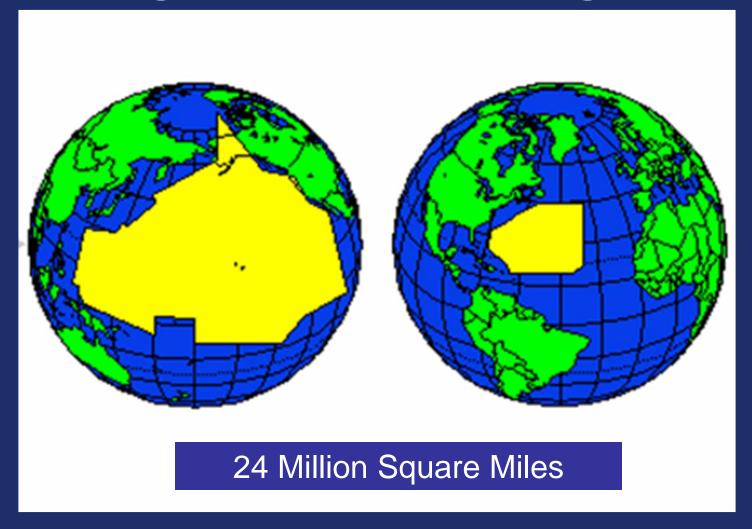


National Airspace System





Flight Information Region



How: Authorization to Fly

- Certificate of Waiver or Authorization (COA)
 - Public Entities (government)
 - Public Agency determines air worthiness
 - Year long flight plan
- Special Airworthiness Certificate
 - Non-public
 - FAA issues air worthiness certificate

Certificate of Waiver or Authorization (COA)

- FAA Form 7711-1
- Authorization to operate UAS in the NAS
- We do not release/discuss with others
- Consists of 5 sets of provisions:
 - General
 - Safety
 - Standard
 - Special (Airspace and ATC)
 - Reporting Requirements



COA Process

Background

Unmanned Aircraft System (UAS) Certificate of Waiver or Authorization (COA) is reserved for all UAS flight outside of active restricted and warning area airspace. The authorization is issued by the Air Traffic Organization (ATO) to a public operator for a specific unmanned aircraft (UA) activity. After a complete application is submitted, the Federal Aviation Administration (FAA) conducts a comprehensive operational, technical, and safety review. If necessary, provisions or limitations may be imposed as part of the approval to ensure the UA can operate safely with other airspace users. In most cases, the FAA will provide a formal response within 60 working days from the time a completed application is submitted

To better support the needs of our customers, the FAA deployed a Web-based application system. The UAS COA Online System provides applicants with an electronic method of requesting a COA.

Reference:

FAA Order JO 7610.4, Special Operations FAA Order JO 7210.3, Facility Operations and Administration



COA Types

Standard:

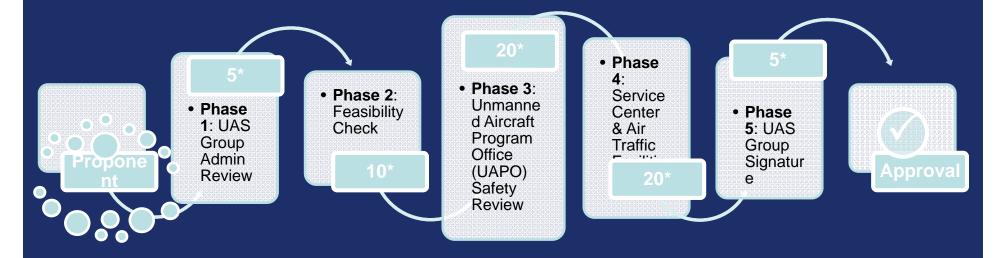
A first-time authorization issued to a public agency to operate in the National Airspace System (NAS). (60 working days)

Renewal:

A reissuance of the initial authorization with no changes proposed by the proponent. (30 working days)



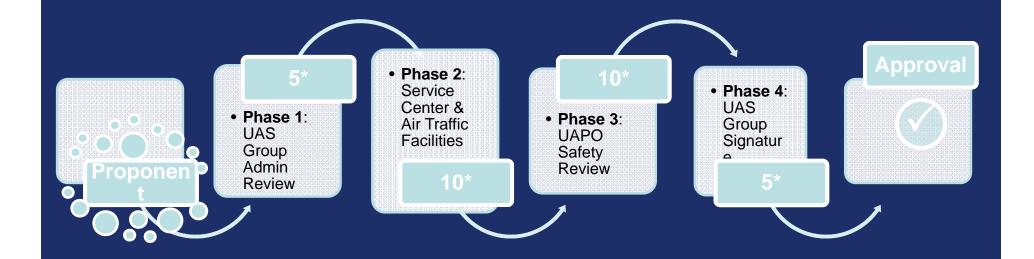
COA Process - Standard



*Working days



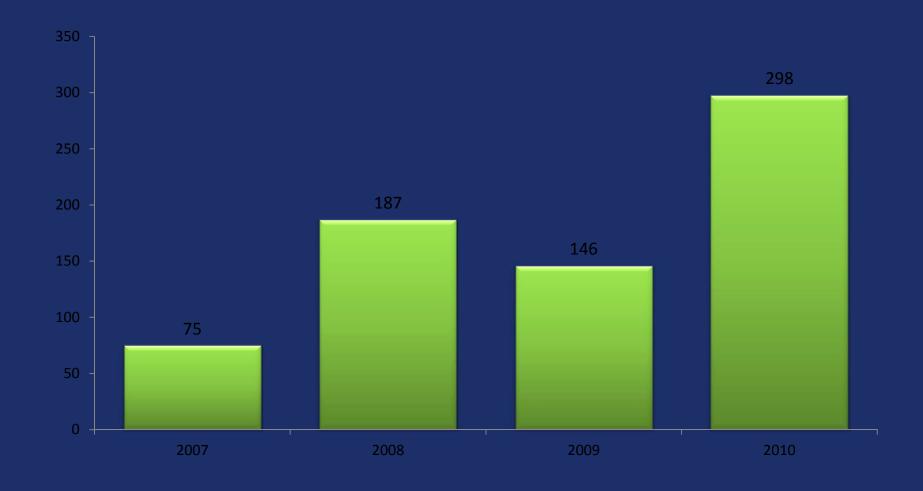
COA Process - Renewal



*Working days



COAs Approved



SEP 2011

COAs Currently Active



Approved = 294



Pending = 140

9/1/2011

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